PENINGKATAN PEMAHAMAN *NATURE OF SCIENCE* (NOS) DAN KETERAMPILAN BERPIKIR KREATIF SISWA SMP MENGGUNAKAN PENDEKATAN EXPLICIT-REFLECTIVE PADA MATERI PENCEMARAN LINGKUNGAN

ABSTRAK

Penelitian ini bertujuan untuk meningkatan pemahaman *Nature of Science* (NOS) dan keterampilan berpikir kreatif siswa SMP menggunakan pendekatan *explicit-reflective*. Subjek penelitian adalah siswa kelas VII di salah satu SMP Negeri di kota Bandung. Penelitian ini menggunakan metode *weak experiment* dengan desain *one-group pretest-posttest design*. Data dikumpulkan dengan menggunakan soal pemahaman *Nature of Science* dan keterampilan berpikir kreatif berbentuk essai yang diberikan sebelum (*pretest*) dan sesudah pembelajaran menggunakan pendekatan *explicit-reflective* (*posttest*), serta angket tanggapan siswa. Pembelajaran menggunakan pendekatan *explicit-reflective* dalam penelitian ini dilakukan dengan 4 tahapan yaitu (1) *black box*, (2) *tracky tracks*, (3) *puzzle solving activitities*, dan (4) *reflection*. Hasil penelitian menunjukkan bahwa setelah penerapan pendekatan *explicit-reflective* pemahaman *Nature of Science* mengalami peningkatan secara signifikan dengan nilai gain sebesar 0,53 (kategori sedang) dan keterampilan berpikir kreatif siswa mengalami peningkatan secara signifikan dengan nilai gain sebesar 0,42 (kategori sedang). Peningkatan ini didukung oleh tanggapan positif dari terhadap implementasi pembelajaran menggunakan pendekatan *explicit-reflective*. Dengan demikian dapat disimpulkan bahwa pendekatan *explicit-reflective* dapat digunakan untuk meningkatkan pemahaman *Nature of science* dan keterampilan berpikir kreatif siswa SMP.

Kata Kunci: *pendekatan explicit-reflective, Nature of Science, keterampilan berpikir kreatif*

IMPROVING UNDERSTANDING NATURE OF SCIENCE (NOS) AND CREATIVE THINKING SKILLS OF STUDENTS IN JUNIOR HIGH SCHOOL BY USING EXPLICIT-REFLECTIVE APPROACH ON ENVIRONMENTAL POLLUTION MATTER

ABSTRACT

The purpose of this study was to improve the understanding of Nature of Science and creative thinking skills of students in junior high school by using explicit-reflective approach. The subjects were grade seven students in one of junior high school in Bandung. This study used weak experiment method with one-group pretest-posttest design. Data was collected by using essay test of understanding nature of science and creative thinking skills were given before and after implementating explicit-reflective approach in learning process, and questionnaire. The Learning process by using explicit-reflective approach in this study which were conducted in 4 steps namelys (1) black box, (2) tracky tracks, (3) puzzle solving activities, and (4) reflection. The result of this study showed that the understanding of Nature of Science increased significantly with gain score 0,53 (medium category) and creative thinking skills increase significantly with gain score 0,42 (medium category). This improvement was supported by positive respond from the students about the implementation of explicit reflective approach in learning process. It can be concluded that explicit-reflective approach can be used to improve the student's understanding of Nature of Science and creative thinking skills.

Keyword: *explicit reflective approach, Nature of Science, creative thinking skills*